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PATENTS



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/796,902
Applicant : Li et al.
Conf. No. : 1631
Filed : March 9, 2004
TC/A.U. : 1600/1615
Examiner : Unknown
Title : Microcapsules for Encapsulation of Bioactive Substances

Docket No. : 11287.105001 AST001
Customer No. : 20786

Mail Stop Amendment
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL LETTER

Sir:

Applicants, through their attorneys and agents, submit the following for filing in the referenced application:

1. Information Disclosure Statement;
2. Form PTO-1449;
3. Non-U.S. Patent Cited References;
4. Certificate of Mailing; and,
5. Postcard.

No fees are believed to be due in connection with this submission. However, the Commissioner is authorized to charge any fees, should they be due, to Deposit Account No. 11-0980.

Respectfully submitted,

Date: August 17, 2005

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By: Madeline I. Johnston
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Jennifer A. Williams



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INFORMATION DISCLOSURE STATEMENT

Sir:

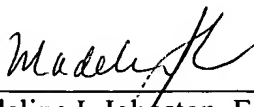
Applicants cite the information on the attached Form PTO-1449, "List of Information Disclosed by Applicant," pursuant to 37 C.F.R. §§ 1.56, 1.97, and 1.98. Applicants have enclosed a copy of each foreign patent or patent application and non-patent referenced. Applicants have not enclosed copies of any cited U.S. patent or patent application publications.

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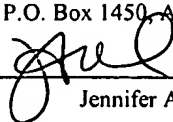
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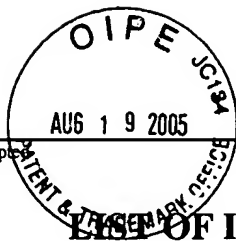
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Jennifer A. Williams



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ATTY. DOCKET NO.	SERIAL NO.	FILING DATE
11287.105001 AST001	10/796,902	March 9, 2004
APPLICANT	GROUP	
Li et al.	1615	

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	4,673,566	06/16/87	Goosen et al.	424	424	
	AB	4,689,293	08/25/87	Goosen et al.	435	182	
	AC	4,798,786	01/17/89	Tice et al.	435	177	
	AD	4,806,355	02/21/89	Goosen et al.	424	424	
	AE	5,410,016	04/25/95	Hubbell et al.	528	354	
	AF	5,427,935	06/27/95	Wang et al.	435	178	
	AG	5,459,054	10/17/95	Skjak-Braek et al.	435	178	
	AH	5,529,914	06/25/96	Hubbell et al.	435	182	
	AI	5,573,934	11/12/96	Hubbell et al.	435	177	
	AJ	5,578,314	11/26/96	Cochrum et al.	424	424	
	AK	5,620,883	04/15/97	Shao et al.	435	174	
	AL	5,626,863	05/06/97	Hubbell et al.	424	426	
	AM	5,795,790	08/18/98	Schinstine et al.	435	382	
	AN	5,801,033	09/01/98	Hubbell et al.	435	182	

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	NAME	TRANSLATION YES NO.

OTHER REFERENCES *(Including Author, Title, Date, Pertinent Pages, Etc.)*

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EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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APPLICANT Li et al.		GROUP 1615

U.S. PATENT DOCUMENTS

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	AO	5,858,746	01/12/99	Hubbell et al.	435	177	
	AP	5,935,849	08/10/99	Schinstine et al.	435	325	
	AQ	6,060,582	05/09/00	Hubbell et al.	528	354	
	AR	6,558,698	05/06/03	Morrison et al.	424	451	

FOREIGN PATENT DOCUMENTS

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OTHER REFERENCES *(Including Author, Title, Date, Pertinent Pages, Etc.)*

AS	Allen, Work et al. editors, "Laboratory Techniques in Biochemistry and Molecular Biology: Sequencing of Proteins and Peptides", The Netherlands, Elsevier Science, 1981, pgs. 139-141
AT	Bartkowiak et al., "Alginate-Oligochitosan Microcapsules: A Mechanistic Study Relating Membrane and Capsules Properties to Reaction Conditions", Chem. Mat., 1999, 11(9), pgs. 2486-2492
AU	Bartkowiak et al., "New Microcapsules Based on Oligoelectrolyte Complexation", Ann. Acad. Sci., 1999, 875, pgs. 36-45
AV	Chang, "Artificial Cells with Emphasis on Bioencapsulation in Biotechnology", Biotechnol. Annu. Rev., 1995, 1, pgs. 267-295
AW	Chang, "Semipermeable Microcapsules", Science, 1964, 146, pgs. 524-525
AX	Chia et al., "Hepatocyte Encapsulations for Enhanced Cellular Functions", Tissue Eng., 2000, 6(5), pgs. 481-495
AY	Chia et al., "Multi-Layered Microcapsules for Cell Encapsulation", Biomaterials, 2002, 23(3), pgs. 849-856
AZ	Clayton et al., "The Transplantation of Encapsulated Islets of Langerhans into the Peritoneal-Cavity of the Biobreeding Rat", Transplant, 1992, 54(3), pgs. 558-560
BA	Clayton et al., "The Effect of Capsule Composition on the Viability and Biocompatibility of Sodium Alginate Poly-L-Lysine Encapsulated Islets", Transplant. Proc., 1992, 24(3), pgs. 956

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						YES	NO
OTHER REFERENCES <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>							
	BB	Dautzenberg et al., "Development of Cellulose Sulfate-Based Polyelectrolyte Complex Microcapsules for Medical Applications", Ann. Acad. Sci., 1999, 875, pgs. 46-63					
	BC	De Vos et al., "Effect of Alginate Composition on the Biocompatibility of Alginate-Polylysine Microcapsules", Biomaterials, 1997, 18, pgs. 273-278					
	BD	Dos Santos et al., "Relevance of Rheological Properties of Gel Beads for their Mechanical Stability in Bioreactors", Biotechnol. Bioeng., 1997, 56(5), pgs. 517-529					
	BE	Fan et al., "Reversal of Diabetes in BB Rats by Transplantation of Encapsulated Pancreatic-Islets", Diabetes, 1990, 39(4), pgs. 519-522					
	BF	Fraenkel-Conrat et al., "Esterification of Proteins with Alcohols of Low Molecular Weight", J. Biol. Chem., 1945, 161, pgs. 259-268					
	BG	Goosen, Kuhlreier et al. editors, "Mass Transfer in Immobilized Cell Systems", Cell Encapsulation Technology and Therapeutics, Boston, 1999, pp. 18-28					
	BH	Hunkeler, "Polymers for Bioartificial Organs", Trends Polym. Sci., 1997, 5, pgs. 286-293					
	BI	Lahooti et al., Morgan et al. editors, "Methods for Microencapsulation with HEMA-MMA", Tissue Engineering Methods and Protocols, New Jersey, Humana Press, 1999, pgs. 331-348					
	BJ	Lim et al., "Microencapsulated Islets as Bioartificial Endocrine Pancreas", Science, 1980, 210, pgs. 908-910					
	BK	Lu et al., "A Novel Cell Encapsulation Method Using Photosensitive Poly(allylamine alpha-cyanocinnamylideneacetate)", Microencapsulation, 2000, 17(2), pgs. 245-251					
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OTHER REFERENCES *(Including Author, Title, Date, Pertinent Pages, Etc.)*

BL	Lu et al., "Cell Encapsulation with Alginate and Alpha-Phenoxycinnamylidene-Acetylated Poly(allylamine)", Biotechnol. Bioeng., 2000, 70(5), pgs. 479-483
BM	Parthasarathy et al., "Synthesis of Polymeric Microcapsule Arrays and their use for Enzyme Immobilization", Nature, 1994, 369, pgs. 298-301
BN	Perols et al., "The Potential of Enzyme Entrapment in Konjac Cold-Melting Gel Beads", Enzyme Microbial Technol., 1997, 20(1), pgs. 57-60
BO	Poncelet et al., "Shear Breakage of Nylon Membrane Microcapsules in a Turbine Reactor", Biotechnol. Bioeng., 1989, 33(1), pgs. 95-103
BP	Rahmatullah et al., "Improvements in Determination of Urea Using Diacetylmonoxime Methods with and without Deproteinisation", Clin. Chim. Acta, 1980, 107, pgs. 3-9
BQ	Reddy et al., "Photosensitive Polymers: Synthesis, Characterization, and Photocrosslinking Properties of Polymers with Pendant Alpha, Beta-Unsaturated Ketone Moiety", J. Appl. Poly. Sci., 1998, 70(11), pgs. 2111-2120
BR	Seglen, "Preparation of Isolated Rat Liver Cells", Methods Cell Biol., 1976, 13, pgs. 29-83
BS	Selden et al., "What Keeps Hepatocytes on the Straight and Narrow? Maintaining Differentiated Function in the Liver", Gut, 1999, 44(4), pgs. 443-446
BT	Soon-Shiong et al., "Insulin Independence in a Type-1 Diabetic Patient after Encapsulated Islet Transplantation", Lancet, 1994, 343(8903), pgs. 950-951
BU	Soon-Shiong et al., "Successful Reversal of Spontaneous Diabetes in Dogs by Intraperitoneal Microencapsulated Islets", Transplant., 1992, 54(5), pgs. 769-774

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BV	Soon-Shiong, "Treatment of Type 1 Diabetes Using Encapsulated Islets", Adv. Drug, Delivery Rev., 1999, 35(2-3), pgs. 259-270
BW	Strand et al., "Alginate-Polylysine-Alginate Microcapsules: Effect of Size Reduction on Capsule Properties", J. Microencapsulation, 2002, 19(5), pgs. 615-630
BX	Sun et al., "Microencapsulated Hepatocytes: An in Vitro and in Vivo Study", Biomater. Artif. Cells Art. Org., 1987, 15, pgs. 1483-1496
BY	Thu et al., "Alginate Polycation Microcapsules 1 Interaction Between Alginate and Polycation", Biomaterials, 1996, 17(10), pgs. 1031-1040
BZ	Thu et al., "Alginate Polycation Microcapsules 2 Some Functional Properties", Biomaterials, 1996, 17(11), pgs. 1069-1079
CA	Wells et al., "Microencapsulation of Viable Hepatocytes in HEMA-MMA Microcapsules - A Preliminary Study", Biomaterials, 1993, 14(8), pgs. 615-620

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